

Application No. 09/985,919
Amendment Dated October 10, 2003
Reply to Office Action of July 10, 2003

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

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1. (Currently Amended) A [[PDP]] plasma display panel (PDP), comprising:
a scan/sustain electrode formed at a peripheral portion of a discharge cell;
a common sustain electrode formed to oppose the scan/sustain electrode at the peripheral portion of the discharge cell;
a first trigger electrode formed to be adjacent to the scan/sustain electrode; and
a second trigger electrode formed to be adjacent to the common sustain electrode,
wherein the first and second trigger electrodes are formed between the scan/sustain electrode and the common sustain electrode, and a gap between the first trigger electrode and the scan/sustain electrode and a gap between the second trigger electrode and the common sustain electrode and are smaller than a gap between the first trigger electrode and the second trigger electrode, and wherein a sustain discharge is generated between the scan/sustain electrode and the common sustain electrode, and a trigger discharge is generated between the first trigger electrode and the scan/sustain electrode and between the second trigger electrode and the common sustain electrode, respectively.

02 2. (Currently Amended) The PDP of claim 1, wherein the first and second trigger electrodes are each formed ~~between~~ adjacent to the scan/sustain electrode and the common sustain electrode, respectively.

3. (Currently Amended) The PDP of claim 2, wherein the first and second trigger electrodes are ~~electrically connected to each other~~ each closer to a sustain electrode than a trigger electrode preventing a transition discharge.

4. (Currently Amended) The PDP of claim 1, wherein each of the scan/sustain electrode and the common sustain electrode ~~are formed between~~ is wider than each of the first and second trigger electrodes.

5. (Previously Presented) The PDP of claim 4, wherein the first and second trigger electrodes are electrically connected to each other.

6. (Original) The PDP of claim 4, wherein the first trigger electrode is electrically connected to the second trigger electrode formed in an adjacent discharge cell, and the second trigger electrode is electrically connected to the first trigger electrode formed in an adjacent discharge cell.

b2 7. (Currently Amended) A [[PDP]] plasma display panel (PDP), comprising:
a scan/sustain electrode formed at a peripheral portion of a discharge cell;
a common sustain electrode formed to oppose the scan/sustain electrode at the peripheral portion of the discharge cell;
a first trigger electrode formed to be adjacent to the scan/sustain electrode; and
a second trigger electrode formed to be adjacent to the common sustain electrode,
the first and second trigger electrodes being formed with widths less than the widths of ~~between~~
the scan/sustain electrode and the common sustain electrode, wherein the first and second
trigger electrodes are each closer to their adjacent sustain electrode than another trigger
electrode.

Not elect 8. (Currently Amended) The PDP of claim 7, ~~wherein the first and second trigger~~
~~electrodes are electrically connected to each other~~ wherein the widths and locations of the trigger
electrodes prevent transition discharges between a trigger electrode and a sustain electrode not
adjacent to said trigger electrode.

b2 9. (Currently Amended) A [[PDP]] plasma display panel (PDP), comprising:
a first trigger electrode formed at a peripheral portion of a discharge cell;
a second trigger electrode formed to oppose the first trigger electrode at the peripheral portion of the discharge cell;
a scan/sustain electrode formed to be adjacent to the first trigger electrode; and
a common sustain electrode formed to be adjacent to the second trigger electrode,
~~the scan/sustain electrode and the common sustain electrode being formed between~~ wherein
the first and second trigger electrodes are each closer to its adjacent sustain electrode than the other trigger electrode.

10. (Currently Amended) The PDP of claim 9, wherein the first and second trigger electrodes are electrically connected to each other each thinner in width than each of the sustain electrodes.

11. (Original) The PDP of claim 9, wherein the first trigger electrode is electrically connected to the second trigger electrode formed in an adjacent discharge cell, and the second trigger electrode is electrically connected to the first trigger electrode formed in an adjacent discharge cell.

b2 12. (Currently Amended) A method for driving a PDP including a scan/sustain electrode and a common sustain electrode on an upper substrate, and first and second trigger electrodes formed to be adjacent to the scan/sustain electrode and the common sustain electrode in parallel, driven by a ~~reset period, and address period, and a~~ sustain period, the method comprising:

alternately applying a first sustain pulse having a predetermined voltage to the scan/sustain electrode and the common sustain electrode during the sustain period;

supplying a second sustain pulse to the first trigger electrode whenever the first sustain pulse is supplied to the scan/sustain electrode and the common sustain electrode; ~~and~~

supplying a third sustain pulse to the second trigger electrode whenever the first sustain pulse is supplied to the scan/sustain electrode and the common sustain electrode, wherein the second and third sustain pulses have a lower voltage value than the first sustain pulse;

supplying the second sustain pulse having a lower voltage value than the first sustain pulse to the first trigger electrode when the first sustain pulse is supplied to the scan/sustain electrode; and

supplying the third sustain pulse having a lower voltage value than the second sustain pulse to the second trigger electrode when the first sustain pulse is supplied to the scan/sustain electrode.

02 13. (Canceled).

14. (Canceled).

15. (Currently Amended) The method of claim ~~[[13]]~~ 12, further comprising:
supplying the third sustain pulse having a lower voltage value than the first sustain pulse to the second trigger electrode when the first sustain pulse is supplied to the common sustain electrode; and

supplying the second sustain pulse having a lower voltage value than the third sustain pulse to the first trigger electrode when the first sustain pulse is supplied to the common sustain electrode.

16. (Previously Presented) The method of claim 12, wherein the second and third sustain pulses have the same voltage value.

17. (Currently Amended) The method of claim ~~[[16]]~~ 12, wherein the second sustain pulse having a lower voltage value than the first sustain pulse is synchronized with the first sustain pulse supplied to the scan/sustain electrode and the common sustain electrode, and is supplied to the first trigger electrode.

18. (Currently Amended) The method of claim ~~[[16]]~~ 12, wherein the third sustain pulse having a lower voltage value than the first sustain pulse is synchronized with the first sustain pulse supplied to the scan/sustain electrode and the common sustain electrode, and is supplied to the second trigger electrode.

19. (Currently Amended) The method of claim 12, wherein a reset pulse is supplied to the second trigger electrode of the discharge cell during ~~[[the]]~~ a reset period.

20. (Currently Amended) The method of claim 12, wherein scan pulses are sequentially supplied to the first trigger electrode during ~~[[the]]~~ an address period, and data pulses synchronized with the scan pulses are supplied to an address electrode formed in a lower substrate opposing the upper substrate.

21. (Previously Presented) A PDP comprising:

- a scan/sustain electrode formed side by side on an upper substrate so as to be positioned respectively toward both ends of a discharge cell;
- a common sustain electrode;
- a first trigger electrode formed side by side to be inwardly adjacent to the scan/sustain electrode; and

02 a second trigger electrode formed side by side to be inwardly adjacent to the common sustain electrode, wherein the first and second trigger electrodes are formed between the scan/sustain electrode and the common sustain electrode, and a gap between the first trigger electrode and the scan/sustain electrode and a gap between the second trigger electrode and the common sustain electrode are smaller than a gap between the first trigger electrode and the second trigger electrode.

22. (Currently Amended) A ~~[[PDP]]~~ plasma display panel (PDP), comprising:

a scan/sustain electrode formed side by side on an upper substrate so as to be positioned respectively toward both ends of a discharge cell;

a common sustain electrode;

~~a first trigger electrode formed side by side to be outwardly adjacent to the scan/sustain electrode; and~~

a second trigger electrode formed side by side to be outwardly adjacent to the common sustain electrode,

wherein the scan/sustain electrode and the common sustain electrode are formed between the first and second trigger electrodes, and a gap between the first trigger electrode and the scan/sustain electrode and a gap between the second trigger electrode and the common sustain electrode are smaller than a gap between the common sustain electrode and the

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scan/sustain electrode, and wherein a sustain discharge is generated between the scan/sustain electrode and the common sustain electrode, and a trigger discharge is generated between the first trigger electrode and the scan/sustain electrode and between the second trigger electrode and the common sustain electrode, respectively.

23. (Currently Amended) A plasma display panel, comprising:
- a scan/sustain electrode formed in a discharge cell;
 - a common sustain electrode formed near the scan/sustain electrode in the discharge cell;
 - a first trigger electrode formed at a first distance from the scan/sustain electrode;
 - and
 - a second trigger electrode formed at a second distance from the common sustain electrode, wherein a first distance is less than a third distance between the first and the second trigger electrodes, wherein a sustain discharge is generated between the scan/sustain electrode and the common sustain electrode, and a trigger discharge is generated between the first trigger electrode and the scan/sustain electrode and between the second trigger electrode and the common sustain electrode, respectively.

02 24. (Currently Amended) The ~~method~~ plasma display panel of claim 23, wherein the second distance is less than the third distance.

25. (New) A method for driving the plasma display panel (PDP), comprising:
applying a first trigger pulse to a first trigger electrode and a second trigger pulse to a second trigger electrode; and
applying a third trigger pulse to the second trigger electrode and a fourth trigger pulse to the first trigger electrode, wherein said first and second trigger pulses and said third and fourth trigger pulses are alternately applied to the PDP.

26. (New) The method of claim 25, further comprising:
applying a first sustain pulse to a scan/sustain electrode; and
applying a second sustain pulse to a common sustain electrode, wherein said first and second sustain pulses are alternately applied to the PDP, and wherein said first and second trigger pulses are applied with said first sustain pulse and said third and fourth trigger pulses are applied with said second sustain pulse.

27. (New) The method of claim 25, wherein said third trigger pulse has a greater voltage value than the fourth trigger pulse and wherein said first trigger pulse has a greater voltage value than the second trigger pulse.

28. (New) The method of claim 25, wherein said third trigger pulse has a similar voltage value to the fourth trigger pulse and wherein said first trigger pulse has a similar voltage value to the second trigger pulse.

29. (New) The method of claim 25, wherein said first trigger pulse and said third trigger have similar voltage values, and said second trigger pulse and said fourth trigger pulse have similar voltage values.
